

Abstract

Full-color Organic Display with Color Filter Technology and Suitable White Emissive Material and Applications Thereof

The invention relates to a color organic display (OLED display) with pixels (1), which comprise in each case a subpixel set (2, 3, 4) with the colors, red, green, and blue, having:

- a substrate (5), which is at least partially transparent to visible light,
- a structured color filter (6), which generates the colors of the subpixels (2, 3, 4) and is subsequently arranged on the substrate (5),
- a first electrode (7, 9) subsequently arranged on the color filter (6), which is at least partially transparent to visible light,
- at least one active layer (8) subsequently arranged on the first electrode (7, 9), containing an emissive material, which is suitable for the generation of electromagnetic radiation, whose spectrum is matched to the color filter (6) such that the pixels (1) during control with the same electrical signal emit light whose color location lies within the white region of the CIE diagram, and
- a second electrode (7, 9) subsequently arranged on the active layer (8).

Figure 1